

**REMARKS**

Claims 77-86 are pending in the present application.

Claims 85-86 were added. Reconsideration of the claims is respectfully requested.

**35 U.S.C. § 103 (Obviousness)**

Claims 77-84 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pierce et al* in view of *Doan et al*. This rejection is respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

Independent claim 77 recites that the source and drain regions each include a first portion in the substrate and a second portion on the substrate over the first portion and adjacent to the insulating material on the sides of the gate electrode. Such a feature is not shown or suggested by the cited references. *Pierce et al* depicts in Figure 5, and describes in the corresponding text, a source 34 and drain 36 within the substrate, and source and drain contacts 38 and 40 over the source and drain. Source and drain contacts 38 and 40 do not satisfy the claim limitation of "a second portion" since they do not form part of the source 34 and drain 36, but are instead a separate conductive structure employed in electrically contacting the source 34 and drain 36. In fact, Figure 5 (erroneously) depicts source and drain contacts 38 and 40 as being separated

from source and drain regions 34 and 36 by gate oxide 18. *Doan et al* fails to teach or suggest a source and drain each having a first portion within the substrate and a second portion on the substrate over the first portion.

Therefore, the rejection of claims 77-84 under 35 U.S.C. § 103 has been overcome.

ATTORNEY DOCKET NO. 94-C-096C2 (STMI01-94096)  
U.S. SERIAL NO. 09/517,987  
PATENT


If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *dvenglarik@novakov.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

NOVAKOV DAVIS & MUNCK, P.C.

Date: 6-13-01

  
Dan Venglarik  
Registration No. 39,409

900 Three Galleria Tower  
13155 Noel Road  
Dallas, Texas 75240  
(972) 628-3621 (direct dial)  
(214) 922-9221 (main number)  
(214) 969-7557 (fax)  
E-mail: *dvenglarik@novakov.com*